

WHAT IS CLAIMED IS:

1. A method of fabricating a liquid crystal display device having a thin film transistor with a gate electrode, a gate insulating film, an active layer, an ohmic contact layer, and source and drain electrodes on a transparent substrate, the liquid crystal display further
5 includes a gate line connected to the gate electrode and a data line connected to the source electrode that define a pixel area, said method comprising the steps of:

forming a passivation layer covering the thin film transistor and the data line on the transparent substrate and patterning the passivation layer to define a contact hole for exposing the drain electrode;

10 forming a transparent conductive film being in contact with the drain electrode via the contact hole on the passivation layer;

coating a negative-type photoresist on the transparent conductive film and forming an exposed area defining a pixel area at the remaining portion thereof other than a portion corresponding to the data line, the gate line and the thin film transistor area;

15 developing the photoresist such that the unexposed area is removed, thereby forming a photoresist pattern; and

patterning the transparent conductive film using the photoresist pattern as a mask to form a pixel electrode in contact with the drain electrode via the contact hole; and

removing the photoresist pattern.

2. The method according to claim 1, wherein the photoresist is coated into a thickness of 1.0 to 2.0 μ m and is soft-baked at a temperature of 100°C to 125°C.

3. The method according to claim 1, wherein the exposed area is formed by exposing the photoresist to a light passing through a transparent part of an exposure mask having an exposure part and said transparent part and then post exposure baking the exposed photoresist.

4. The method according to claim 3, wherein said post exposure baking is conducted at a temperature of 110 °C to 150 °C.

5. The method according to claim 4, wherein said post exposure baking is conducted at a temperature of 125 °C to 145 °C.

6. The method according to claim 3, wherein said exposure part of the exposure mask corresponds to the pixel area, and a shielding part thereof corresponds to the data line, the gate line and the thin film transistor area.

7. The method according to claim 1, wherein said development is conducted by an alkali aqueous solution for 60 to 120 seconds.

8. A method of fabricating a liquid crystal display device, comprising:

5 forming a thin film transistor having a gate electrode, a source electrode, and a drain electrode on a transparent substrate;

forming both a gate line that is electrically connected to the gate electrode and a data line that is electrically connected to the source electrode;

forming a passivation layer over the thin film transistor, the gate line, and the data line;

forming a transparent conductive film over the passivation layer;

coating the transparent conductive film with a negative-type photoresist;

exposing the negative-type photoresist with an image of a pixel electrode, wherein the image of a pixel electrode does not fully extend across the data line and the gate line;

15 developing the negative-type photoresist such that the unexposed area of the negative-type photoresist is removed and a portion of the transparent conductive film is exposed; and

patterning the transparent conductive film using the photoresist pattern to form a pixel electrode.

9. A method of fabricating a liquid crystal display device according to claim 8, further including removal of the photoresist pattern.

10. A method of fabricating a liquid crystal display device according to claim 8, wherein the negative-type photoresist is coated with a thickness of 1.0 to 2.0 μ m and soft-baked at a temperature between 100°C to 150°C before exposure.

11. A method of fabricating a liquid crystal display device according to claim 8, wherein exposure is performed by passing light passing through an exposure mask having transparent part and an opaque part.

12. A method of fabricating a liquid crystal display device according to claim 11, wherein ultraviolet light passing is used for exposure.

13. A method of fabricating a liquid crystal display device according to claim 8, further including post exposure baking at a temperature of 110 °C to 150 °C.

14. A method of fabricating a liquid crystal display device according to claim 13, wherein said post exposure baking is conducted at a temperature of 125 °C to 145 °C.

15. A method of fabricating a liquid crystal display device according to claim 8, wherein
5 patterning the transparent conductive film uses a wet etchant.

16. A method of fabricating a liquid crystal display device according to claim 8, wherein developing the negative-type photoresist uses an aqueous alkali solution.

17. A method of fabricating a liquid crystal display device according to claim 8, further
10 includes the step of forming a contact hole through the passivation layer so as to expose the drain electrode.

18. A method of fabricating a liquid crystal display device according to claim 17, wherein
15 the transparent conductive film contacts the drain electrode through the contact hole.